

FIG. 1

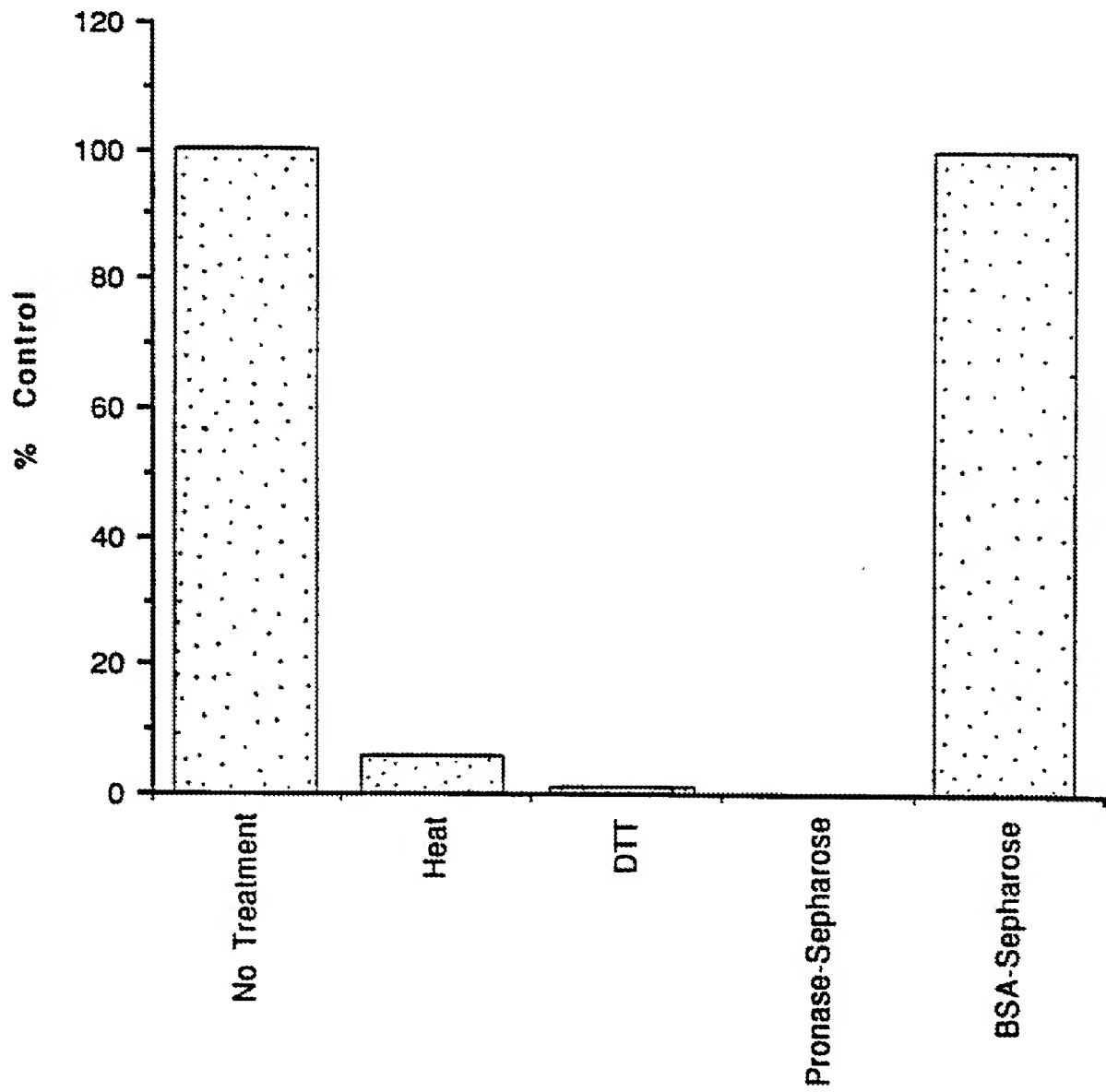


FIG. 2

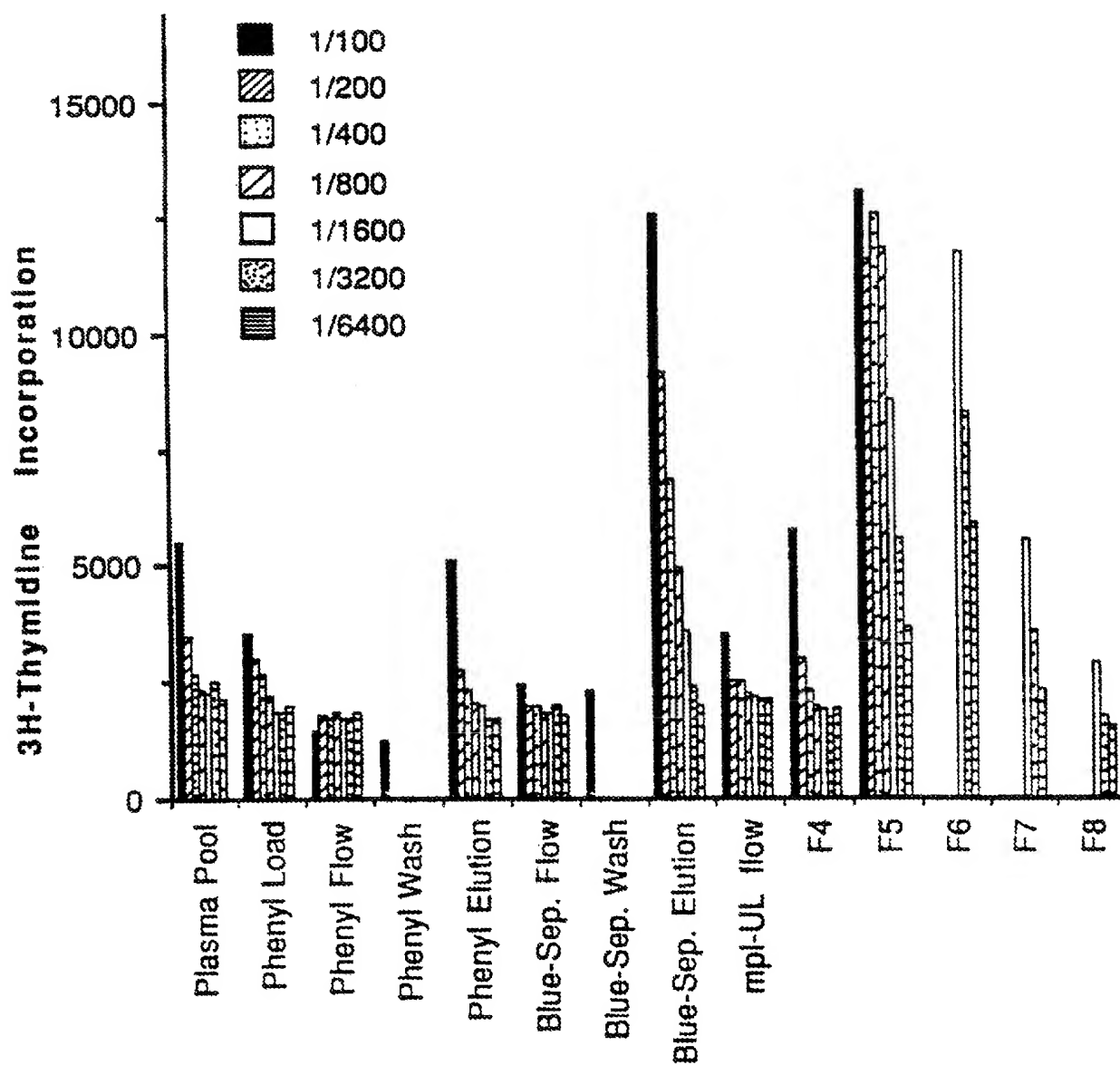


FIG. 3

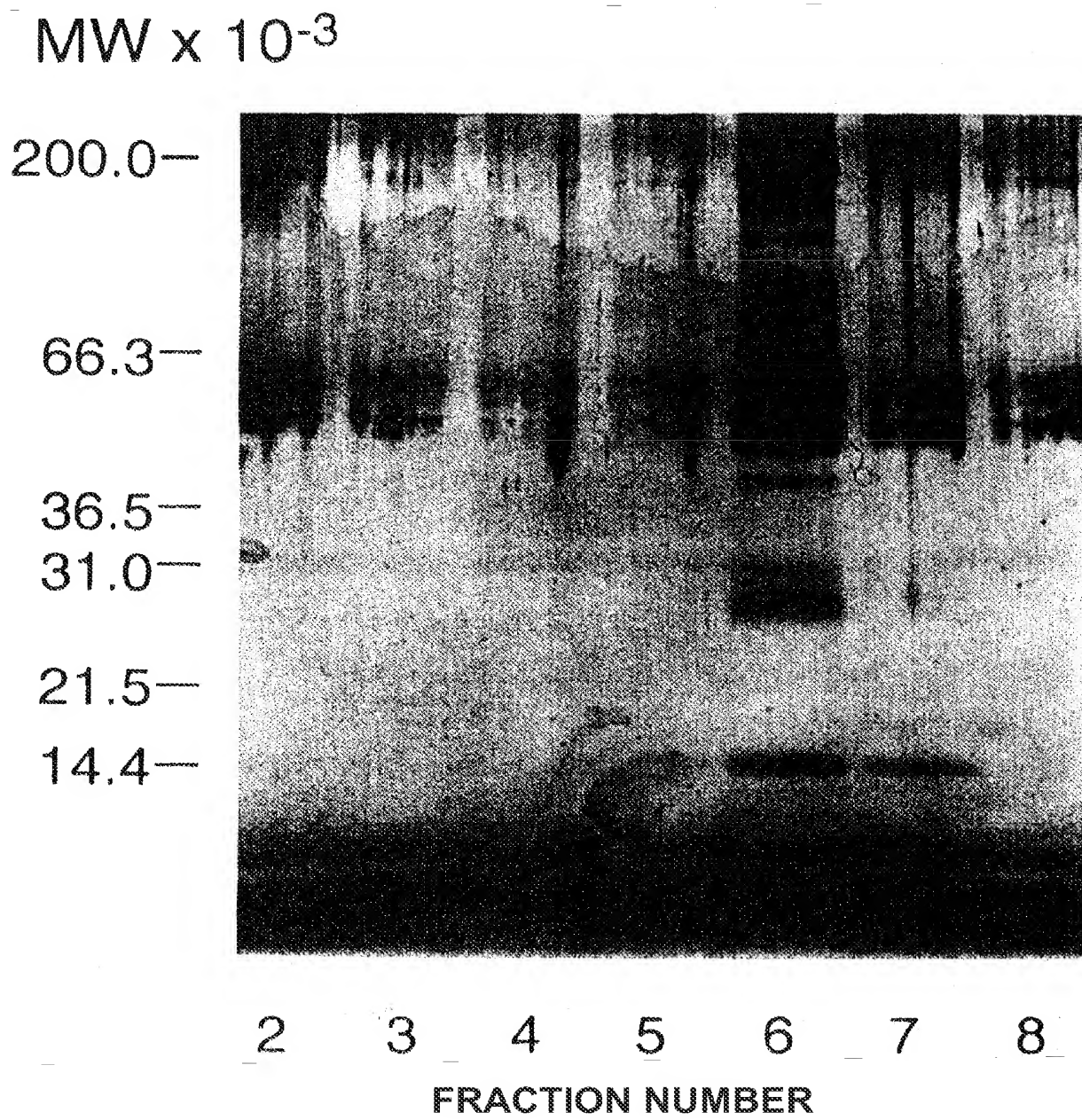


FIG. 4

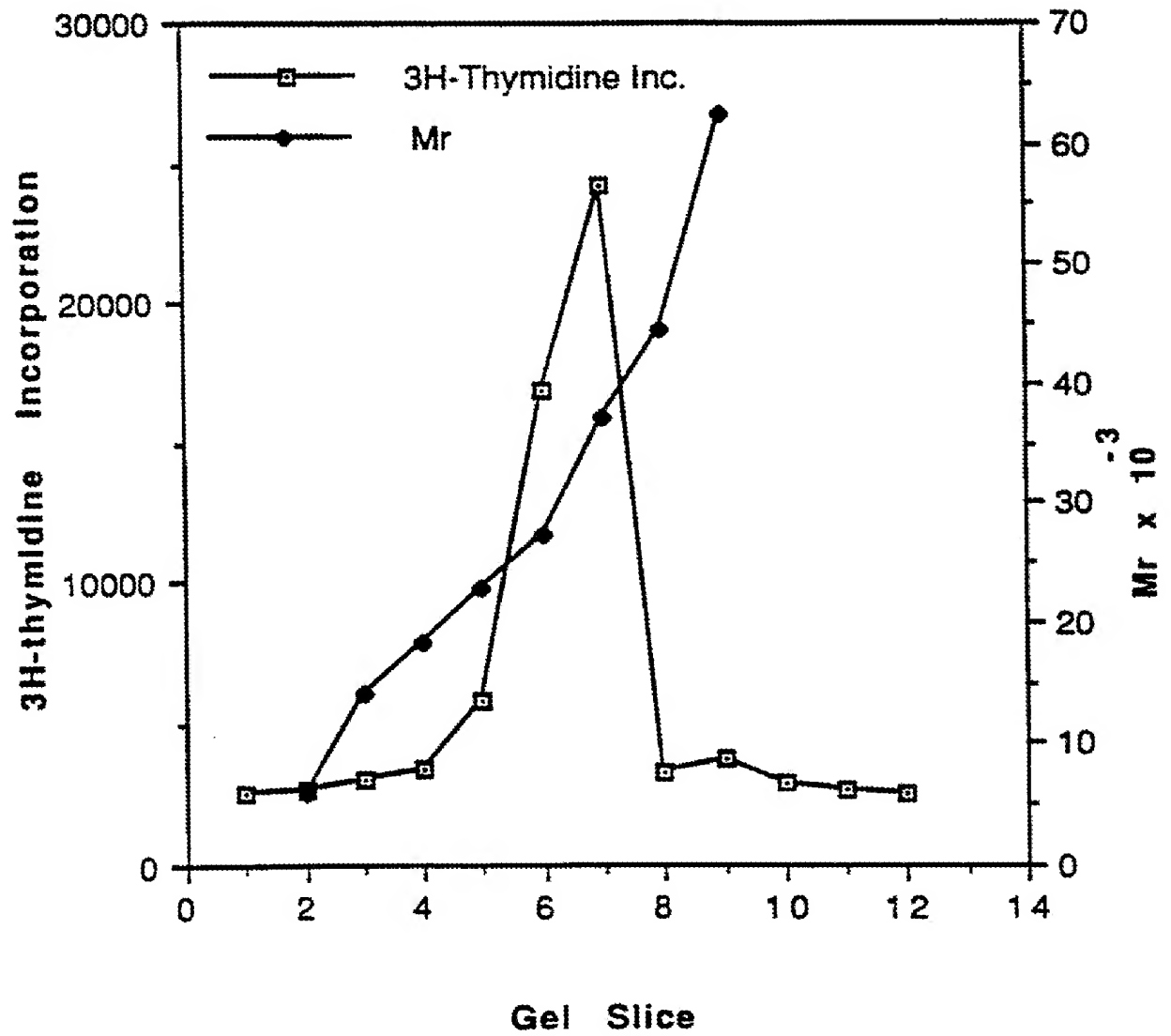


FIG. 5

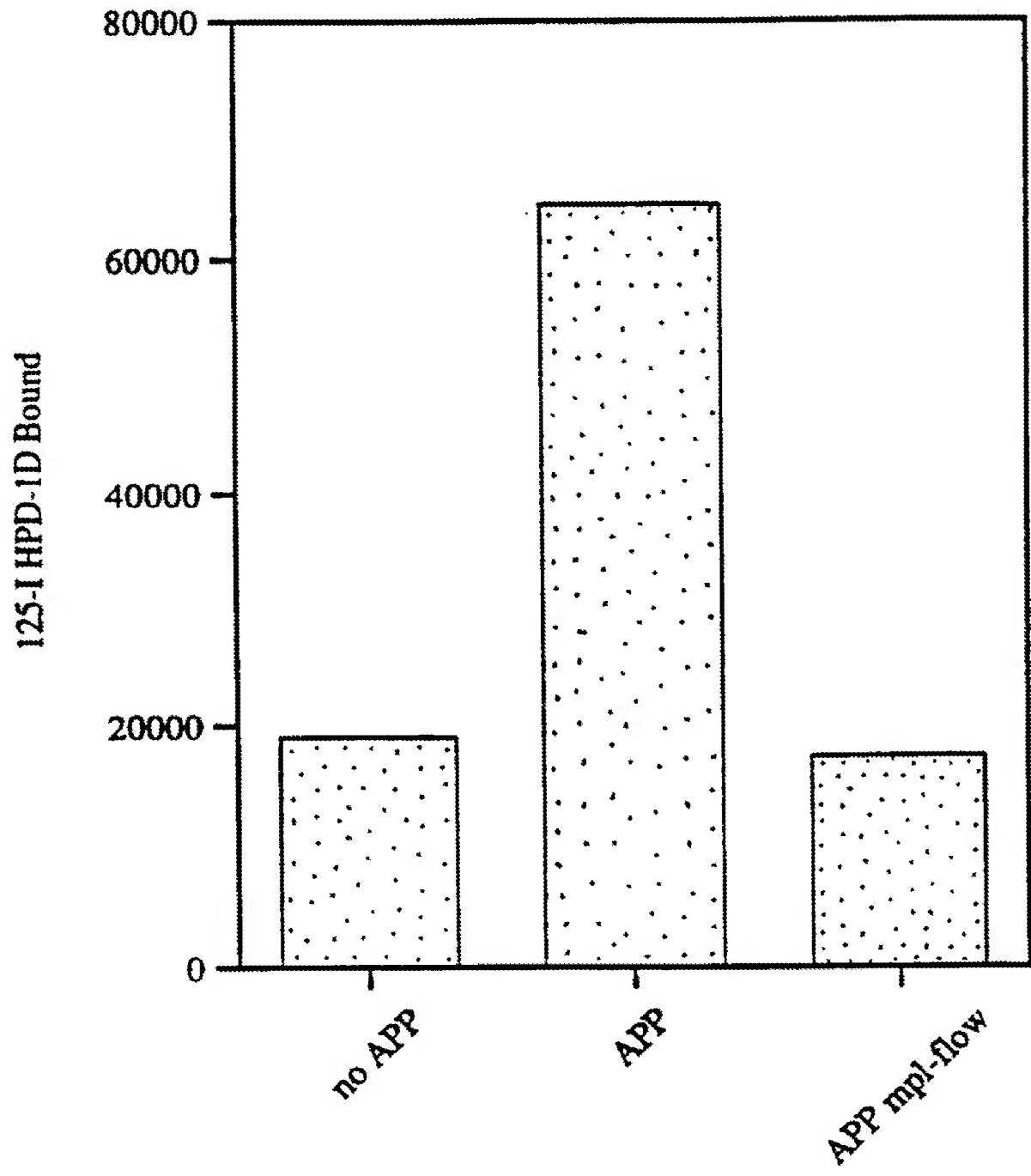


FIG. 6

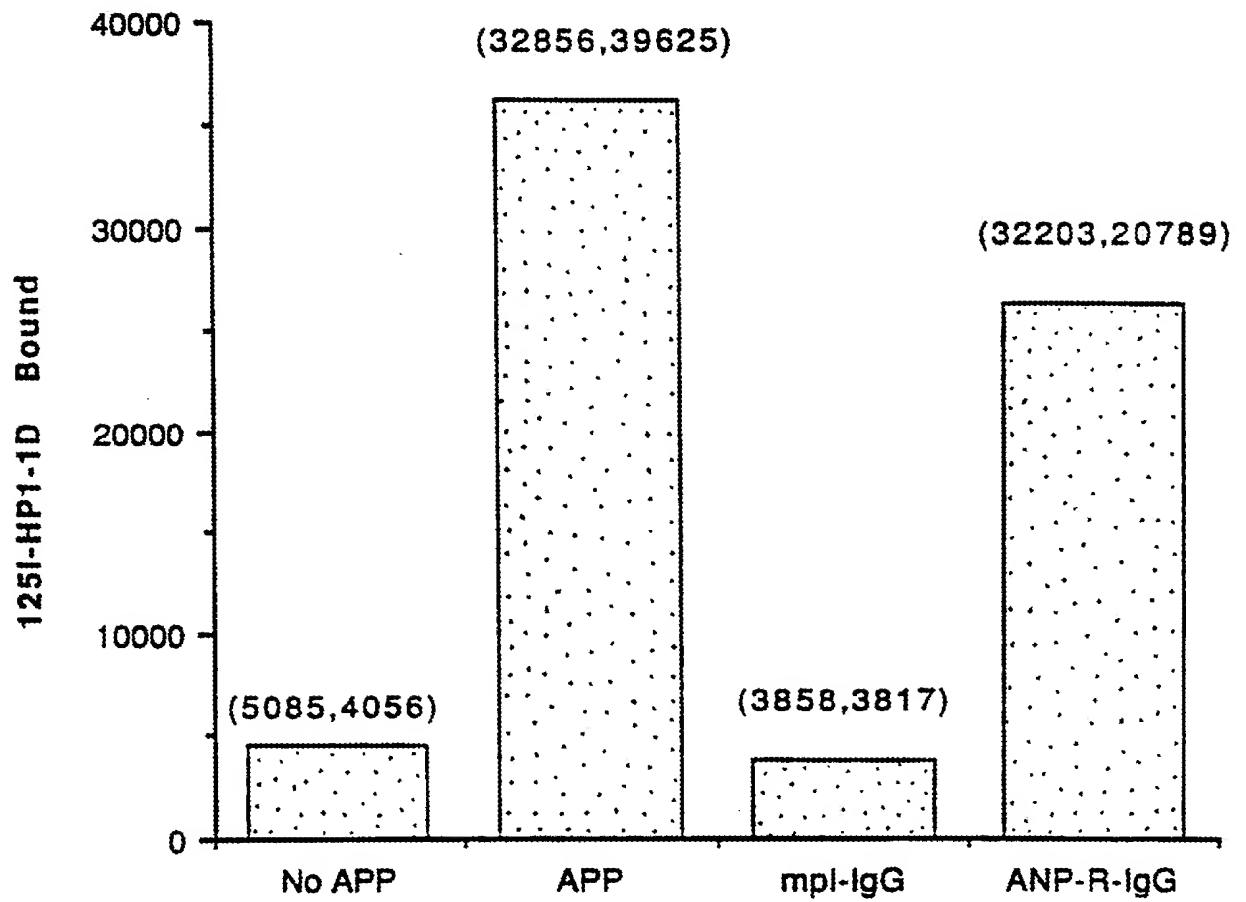


FIG. 7

1 GAATTCCTGG AATACCAGCT GACAATGATT TCCTCCTCAT CTTTCAACCT CACCTCTCCT CATCTAAGAA TTGCTCCTCG TGGTCATGCT TCTCCTAACT
CTTAAGGACC TTATGGTCGA CTGTTACTAA AGGAGGAGTA GAAAGTTGGA GTGGAGAGGA GTAGATTCTT AACGAGGAGC ACCAGTACGA AGAGGATTGA
↓ L L L V V M L L L T
-10

101 A R L T L S S P A P P A C D L R V L S K L L R D S H V L H S R L
GCAAGGCTAA CGCTGTCCAG CCGGCTCCT CCTGCTTGTG ACCTCCGAGT CCTCAGTAAA CTGCTTGTG ACTCCCATGT CCTTCACAGC AGACTGGTGA
CGTTCCGATT GCGACAGGTC GGGCCGAGGA GGACGAACAC TGGAGGCTCA GGAGTCATTT GACGAAGCAC TGAGGGTACA GGAAGTGTG TCTGACCACT
20

201 GAACTCCCAA CATTATCCC TTTATCCGG TAACTGGTAA GACACCCATA CTCCCAGGAA GACACCATCA CTTCTCTCTAA CTCCTTGACC CAATGACTAT
CTTGAGGGTT GTAATAGGGG AAATAGGCGC ATTGACCAAT CTGTGGGTAT GAGGGTCCCT CTGTGGTAGT GAAGGAGATT GAGGAACCTGG GTTACTGATA

301 TCTTCCATA TTGTCCCCAC CTAATGATCA CACTCTCTGA CAAGAATTAT TCTTCACAAT ACAGCCCGCA TTTTAAAAGCT CTCGTCTAGA
AGAAGGGTAT AACAGGGGTG GATGACTAGT GTGAGAGACT GTTCTTAATA AGAAGTGTTA TGTCGGGGCGT AAATTTTCGA GAGCAGATCT

FIG. 8A

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1  tcttctaccatctgctccccagagggctgctgctgtgcacttggtcctggagcccttctccacccggatagattcctcaccccttgccccgcctttg

101  cccccacctactctgccccagaagtgaagagcctaagcgcctccatggccccaggaaggattcaggggagagggccccaaacagggagccacgcccagcca

    -20      -10      -5      0      5      10      15      20      25      30      35      40
MetGluLeuThrGluLeuLeuValValMetLeuLeuThrAlaArgLeuThrLeuSerSerProAlaProProAlaCysAsp
201  gacacccccggccagaATGGAGCTGACTGAATTGCTCCTCGTGCATGCTTCTCCTAACTGCAAGGTAACGCTGTCCAGCCCGGCTCCTCCTGCTTG
    10      20      30      35      40      45      50      55      60      65      70      75      80      85      90      95      100
LeuArgValLeuSerLysLeuLeuArgAspSerHisValLeuHisSerArgLeuSerGlnCysProGluValHisProLeuProThrProValLeuLeu
301  ACCTCCGAGTCTCAGTAACTGCTTGGTACTTCCCATGTCTTCACAGCAGACTGAGCCAGTGCCTTACCCCTTTCCTTACACCTGTCTCCTGCT
    50      55      60      65      70      75      80      85      90      95      100      105      110      115      120      125      130
ProAlaValAspPheSerLeuGlyGluTrpLysThrGlnMetGluGluThrLysAlaGlnAspIleLeuGlyAlaValThrLeuLeuGluGlyVal
401  GCCTGCTGTGACTTTAGCTTGGGAGAAATGGAACCCAGATGGAGGACACCAAGGCACAGGACATCTGGGAGCAGTGACCCCTTCTGCTGGAGGGAGTG
    80      85      90      95      100      105      110      115      120      125      130      135      140      145      150      155      160
MetAlaAlaArgGlyGlnLeuGlyProThrCysLeuSerSerLeuLeuGlyGlnLeuSerGlyGlnValArgLeuLeuGlyAlaLeuGlnSerLeuLeu
501  ATGGCAGCACGGGACAACTGGGACCCACTTGCCTCTCATCCCTCTGGGCAGCTTCTGGACAGGTCCGTCTCCTCCTTGGGGCCCTGCAGAGCCTCC
    110      115      120      125      130      135      140      145      150      155      160      165      170      175      180      185      190
GlyThrGlnLeuProProGlnGlyArgThrThrAlaHisLysAspProAsnAlaIlePheLeuSerPheGlnHisLeuLeuArgGlyLysValArgPhe
601  TTGGAACCCAGCTTCCTCCACAGGGCAGGACCAACAGCTCACAAGGATCCCAATGCCATCTTCTCTGAGCTTCCAACACACCTGCTCCGAGGAAAGGTGCGTTT
    150      155      160      165      170      175      180      185      190      195      200      205      210      215      220      225      230
LeuMetLeuValGlyGlySerThrLeuCysValArgArgAlaProProThrThrAlaValProSerArgThrSerLeuValLeuThrLeuAsnGluLeu
701  CCTGATGCTTGTAGGAGGTCCACCCCTCTGCGTCAGGGGGGGCCCCACCCACAGCTGTCCCCAGCAGAACCTCTCTAGTCTCACACTGAACGAGCTC
    180      185      190      195      200      205      210      215      220      225      230      235      240      245      250      255      260
ProAsnArgThrSerGlyLeuLeuGluThrAsnPheThrAlaSerAlaArgThrThrGlySerGlyLeuLeuLysTrpGlnGlnGlyPheArgAlaLysIle
801  CCAAACAGGACTTCTGGATTGTTGGAGACAAACTTCACTGCCTCAGCCAGAACTACTGGCTCTGGCTTCTGAAGTGGCAGCAGGGATTTCAGAGCCAAGA
    260      265      270      275      280      285      290      295      300      305      310      315      320      325      330      335      340

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FIG. 8B

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210      220      230      240
ProGlyLeuLeuAsnGlnThrSerArgSerLeuAspGlnIleProGlyTyrLeuAsnArgIleHisGluLeuLeuAsnGlyThrArgGlyLeuPhePro
901 TTCTGGTCTGCTGAACCAACCTCCAGGTCCCTGGACCAAAATCCCCGGGATACCTGAACAGGATACACGAACTCTTGAATGGAACCTCGTGGACTCTTTTCC

250      260      270
GlyProSerArgArgThrLeuGlyAlaProAspIleSerSerGlyThrSerAspThrGlySerLeuProProAsnLeuGlnProGlyTyrSerProSer
1001 TGGACCCCTCAGCAGGACCCCTAGGAGCCCCGGACATTTCCCTCAGGAACATCAGACACAGGCTCCCTGCCACCCCAACCTCCAGCCTGGATATTCTCCTTCC

280      290      300
ProThrHisProProThrGlyGlnTyrThrLeuPheProLeuProProThrLeuProThrProValValGlnLeuHisProLeuLeuProAspProSerAla
1101 CCAACCCATCCTCCTACTGGACAGTATACGCTCTTCCCTCTTCCACCCACCTTGCCCAACCCCTGTGGTCCAGCTCCACCCCTGCTTCTCCTGACCCCTTCTG

310      320      330
ProThrProThrProThrSerProLeuLeuAsnThrSerTyrThrHisSerGlnAsnLeuSerGlnGluGly
1201 CTCCAACGCCACCCCTACGAGCCCTCTTCTTAAACACATCCTACACCCACTCCAGAAATCTGTCTCAGGAAGGTAAGgttctcagacacactgccgacatc

1301 agcattgtctcatgtacagctcccttccctgcaggcgccccctggagacaaactggacaagatttccctactttctcctgaaaccccaagccctggtaaaa

1401 gggatacacaggactgaaaagggaatcattttcactgtacattataaaccttcagaagctatttttttaagctatcagcaatactcatcagagcagcta

1501 gctctttggtctattttctgcagaaaatttgcaactcactgattctctacatgctcttttctgtataaactctgcaaaggcctgggctggcctggcagtt

1601 gaacagaggagagactaaccttgagtcagaaaacagagaaaagggtaatttcccttgccttcaaattcaaggccttccaacgccccccatccccctttactat

1701 cattctcagtgaggactctgatcccatattcttaacagatctttactctctgagaaatgaataagctttctctcagaaaaaaataaaaaaa

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h-ML
291 T L P T P V V Q L H P L L P D P S A P T P T P T S P L L N T S Y T H S Q N L S Q E G

FIG. 10A

1 GAGTCCTTGG CCCACCTCTC TCCACCCCGA CTCTGCCGAA AGAAGCACAG AAGCTCAAAG CGCCTCCATG GCCCCAGGAA AGATTTCAGG GAGAGGCCCC

101 ATACAGGGAG CCACTTCAGT TAGACACCCT GGCCAGAATG GAGCTGACTG ATTTGCTCCT GCGGCCCATG CTTCTTGCGAG TGGCAAGACT AACTCTGTCC

201 AGCCCCGTAG CTCCTGCTG TGACCCCGA CTCCTAATA AACTGCTGCG TGACTCCAC CTCCTTCACA GCCGACTGAG TCAGTGTCCC GACGTGACC

301 CTTTGTCTAT CCCTGTTCTG CTGCTGCTG TGGACTTTAG CCTGGGAGAA TGGAAAACCC AGACGGAACA GAGCAAGGCA CAGGACATTC TAGGGGCAGT

401 GTCCCTTCTA CTGGAGGAG TGATGGCAGC ACGAGGACAG TTGGAACCCCT CCTGCCCTCTC ATCCCTCCTG GGACAGCTTT CTGGGCAGGT TCGCCTCCTC

501 TTGGGGGCCC TGCAGGGCCT CCTAGGAACC CAGGGCAGGA CCACAGCTCA CAAGGACCCC AATGCCCTCT TCTTGAGCTT GCAACAACCTG CTTCCGGGAA

601 AGGTGGGCTT CCTGCTTCTG GTAGAAGGTC CCACCTCTG TGTGAGACGG ACCCTGCCAA CCACAGCTGT CCCAAGCAGT ACTTCTCAAC TCCTCACACT

Met GluLeuThrA spLeuLeuLe uAlaAlaMet LeuLeuAlaV alAlaArgLe uThrLeuSer

SerProValA laProAlaCy sAspProArg LeuLeuAsnL ysLeuLeuAr gAspSerHis LeuLeuHisS erArgLeuSe rGlnCysPro AspValAspPro

LeuSerI l eProValLeu LeuProAlaV alAspPheSe rLeuGlyGlu TrpLysThrG lnThrGluG l nSerLysAla GlnAspIleL euGlyAlaVal

SerLeuLeu LeuGluGlyV alMetAlaAl aArgGlyGln LeuGluProS erCysLeuSe rSerLeuLeu GlyGlnLeuS erGlyGlnVa lArgLeuLeu

LeuGlyAlaL euGlnGlyLe uLeuGlyThr GlnGlyArgT hrThrAlaHi sLysAspPro AsnAlaLeuP heLeuSerLe uGlnGlnLeu LeuArgGlyLys

ValArgPh eLeuLeuLeu ValGluGlyP roThrLeuCy sValArgArg ThrLeuProT hrThrAlaVa lProSerSer ThrSerGlnL euLeuThrLeu

FIG. 10B

170	AsnLysPhe	ProAsnArgT	hrSerGlyLe	uLeuGluThr	AsnPheSerV	alThrAlaAr	gThrAlaGly	ProGlyLeuL	euSerArgLe	uGlnGlyPhe	200
701	AAACACAGTC	CCAAACAGGA	CTTCTGGATT	GTTGGAGACG	AACCTTCAGTG	TCACAGCCAG	AACGTCTGGC	CCTGGACTTC	TGAGCAGGCT	TCAGGGAATC	
	180										
	210										
	ArgValLysI	leThrProG1	yGlnLeuAsn	GlnThrSerA	rgSerProVa	lGlnIleSer	GlyTyrLeuA	snArgThrHi	sGlyProVal	AsnGlyThrHis	230
801	AGAGTCAAGA	TTACTCCTGG	TCAGCTAAAT	CAAAACCTCCA	GGTCCCCAGT	CCAAATCTCT	GGATACCTGA	ACAGGACACA	CGGACCTGTG	AATGGAACTC	
	240										
	260										
	GlyLeuPh	eAlaGlyThr	SerLeuGlnT	hrLeuGluAl	aSerAspIle	SerProGlyA	laPheAsnLy	sGlySerLeu	AlaPheAsnL	euGlnGlyGly	
901	ATGGGCTCTT	TGCTGGAACC	TCACTTCAGA	CCCTGGAAAGC	CTCAGACATC	TCGCCCCGAG	CTTTCACAA	AGGCTCCCTG	GCATTCAACC	TCCAGGGTGG	
	280										
	290										
	LeuProPro	SerProSerL	euAlaProAs	pGlyHisThr	PropheProp	roSerProAl	aLeuProThr	ThrHisGlyS	erProProG1	nLeuHisPro	300
1001	ACTTCCCTCCT	TCTCCAAGCC	TTGCTCCTGA	TGGACACACA	CCCTTCCCTC	CTTCACCTGC	CTTGCCCCACC	ACCCATGGAT	CTCCACCCCC	GCTCCACCCC	
	310										
	320										
	330										
	LeupheProA	spProSerTh	rThrMetPro	AsnSerThrA	laProHisPr	oValThrMet	TyrProHisP	roArgAsnLe	uSerGlnGlu	Thr	
1101	CTGTTTCCCTG	ACCCCTCCAC	CACCATGCCT	AACCTCTACCG	CCCTTCATCC	AGTCACAATG	TACCCCTCATC	CCAGGAATTT	GTCTCAGGAA	ACATAGCGCG	
	1201	GGCACTGGCC	CAGTGAGCGT	CTGCAGCTTC	TCTCGGGGAC	AAGCTTCCCC	AGAGGCGAGCT	GCATCTGCTC	CAGATGTTCT	GCTTTCACCT	
	1301	AAAAGGCCCT	GGGGAAGGGA	TACACAGCAC	TGGAGATTGT	AAAATTTTAG	GAGCTATTTT	TTTTTAACCT	ATCAGCAATA	TTTCATCAGAG	CAGCTAGCGA
	1401	TCTTTGGTCT	ATTTTCGGTA	TAAATTTGAA	AATCACTAAT	TCT					

hML	1	SP	AP	ACD	L	R	V	L	S	K	L	R	D	S	H	V	L	H	S	R	L	S	Q	C	P	E	V	H	P	L	P	T	P	V	L	L	P	A	V	D	F	S	L	G	E						
mML	1	SP	V	A	P	A	C	D	P	R	L	N	K	L	R	D	S	H	L	L	H	S	R	L	S	Q	C	P	D	V	D	P	L	S	I	P	V	L	L	P	A	V	D	F	S	L	G	E			
hML	51	WK	T	Q	M	E	E	T	K	A	Q	D	I	L	G	A	V	T	L	L	E	G	V	M	A	A	R	G	Q	L	G	P	T	C	L	S	S	L	L	G	Q	L	S	G	Q	V	R	L	L		
mML	51	WK	T	Q	T	E	Q	S	K	A	Q	D	I	L	G	A	V	S	L	L	E	G	V	M	A	A	R	G	Q	L	E	P	S	C	L	S	S	L	L	G	Q	L	S	G	Q	V	R	L	L		
hML	101	L	G	A	L	Q	S	L	L	G	T	Q	L	P	P	Q	G	R	T	T	A	H	K	D	P	N	A	I	F	L	S	F	Q	H	L	L	R	G	K	V	R	F	L	M	L	V	G	S	T	L	
mML	101	L	G	A	L	Q	G	L	L	G	T	·	·	·	Q	G	R	T	T	A	H	K	D	P	N	A	L	F	L	S	L	Q	Q	L	L	R	G	K	V	R	F	L	L	V	E	G	P	T	L		
hML	151	C	V	R	R	A	P	T	T	A	V	P	S	R	T	S	L	V	L	T	L	N	E	L	P	N	R	T	S	G	L	E	T	N	F	T	A	S	A	R	T	T	G	S	G	L	L	K	W		
mML	147	C	V	R	R	T	L	P	T	T	A	V	P	S	S	T	S	Q	L	L	T	L	N	K	F	P	N	R	T	S	G	L	E	T	N	F	S	V	T	A	R	T	A	G	P	G	L	L	S	R	
hML	201	Q	Q	G	F	R	A	K	I	·	P	G	L	N	Q	T	S	R	S	L	D	Q	I	P	G	Y	L	N	R	I	H	E	L	L	N	G	T	R	G	L	F	P	G	P	S	R	R	T	L	G	
mML	197	L	Q	G	F	R	V	K	I	T	P	G	Q	L	N	Q	T	S	R	S	P	V	Q	I	S	G	Y	L	N	R	T	H	G	P	V	N	G	T	H	G	L	F	A	G	T	S	L	Q	T	L	E
hML	250	A	P	D	I	S	S	G	T	S	D	T	G	S	L	P	P	N	L	Q	P	G	S	P	S	P	T	H	P	T	G	Q	Y	T	L	F	P	L	P	P	T	L	P	T	·	·	·	P	V		
mML	247	A	S	D	I	S	P	G	A	F	N	K	G	S	L	A	F	N	L	Q	G	G	L	P	P	S	P	S	L	A	P	D	G	H	·	T	P	F	P	P	S	P	A	L	P	T	T	H	G	S	P
hML	297	V	Q	L	H	P	L	L	P	D	P	S	A	P	T	P	T	S	P	L	N	T	S	Y	T	H	S	Q	N	L	S	Q	E	G																	
mML	296	P	Q	L	H	P	L	F	P	D	P	S	T	T	M	P	N	S	T	A	P	H	P	V	T	M	Y	P	H	P	R	N	L	S	Q	E	T														

FIG. 12A

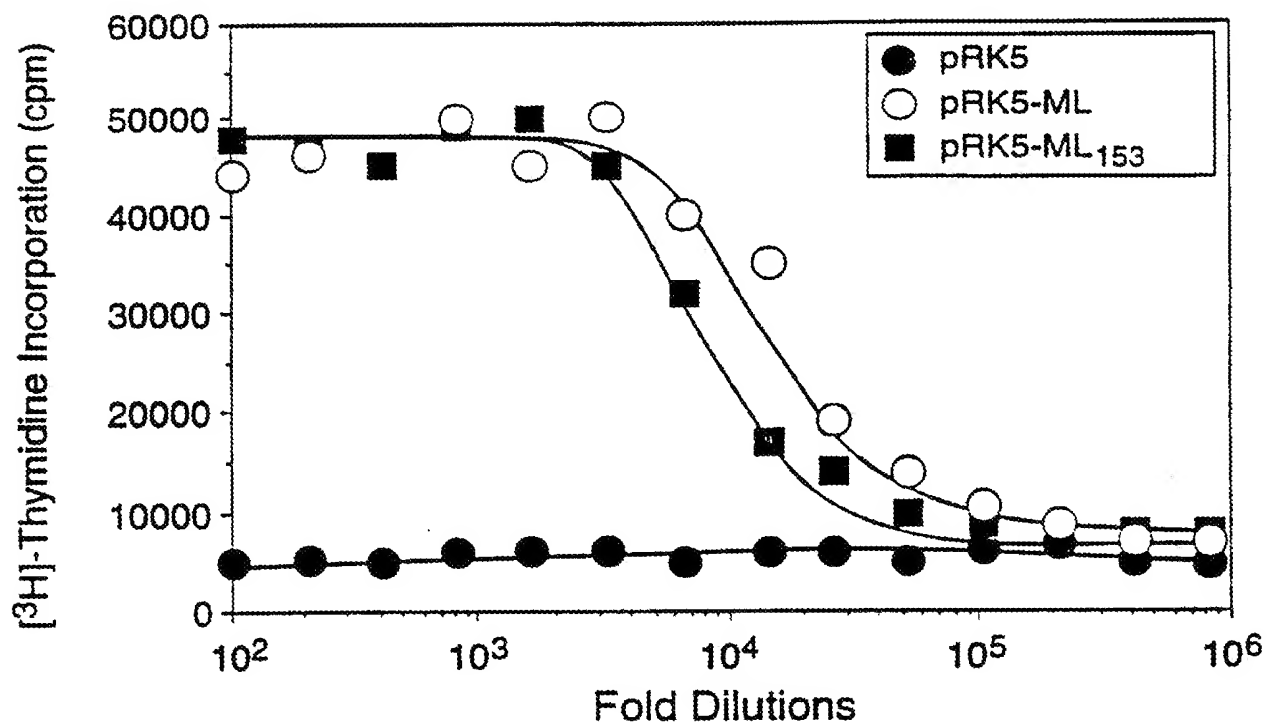


FIG. 12B

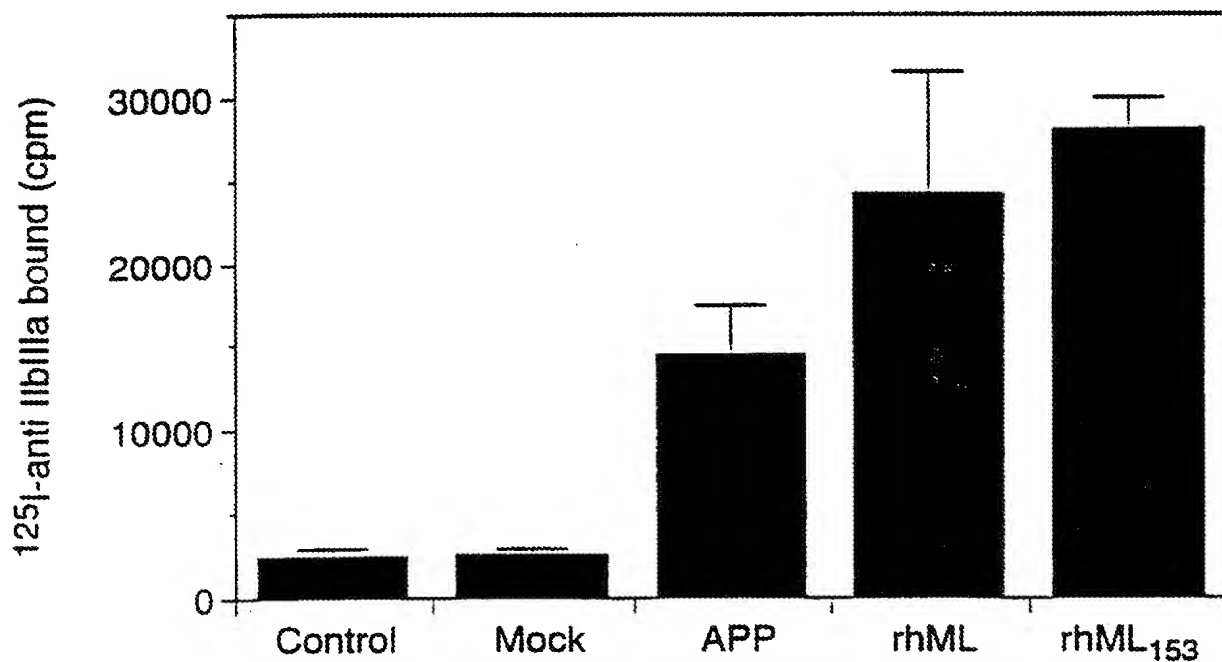


FIG. 12C

